

## PROCEEDINGS OF THE CAMBRIDGE ENTOMOLOGICAL CLUB.

The 291st regular meeting of the club was held on Tuesday evening, December 21, 1909, with President Bolster in the chair, and with sixteen members and one visitor present.

Mr. Emerton, reporting for the Committee on the Smoker, said that preparations for two hundred visitors had been made, the smoker to be held at the Grundmann Studios, 198 Clarendon Street, Tuesday evening, December 28, from 8 p. m. Mr. Field reported the list of contributors to the exhibition and the preparation for the dedication of the Harris tablet at Milton on Friday, December 31, at 12.50 p. m. President Bolster reported the result of the meeting of the Executive and Publication Committee: the resignation of Mr. Field as editor of *PSYCHE*, and the hope that Mr. Brues would be able to undertake the work. Mr. Brues, being called upon by the chair, replied that he would try to manage things so that he could take up the work. The president appointed the following nominating committee to prepare a list of officers for the club for the ensuing year: Messrs. Blackburn, Reiff and Newcomb. Mr. Fiske was appointed delegate to represent the club at the eighth International Zoölogical Congress at Graz, Austria, in August of 1910. Dr. A. L. Reagh was elected member of the club.

Mr. Johnson exhibited a box of unique larvæ from several sources; a nymph, possibly of a may fly, from Ammonoosuc River, Fabyans, N. H., taken by C. H. Frost September 19, 1909; larvæ of *Galerita janus*, and what was pronounced by Professor Wheeler as being probably a female *Phengodes* from Providence, R. I.

He also exhibited two boxes of Diptera of the family Dolichopodidæ which has recently claimed his attention. He mentioned some new records for New England and said he had recognized 127 species from these states.

Mr. Forbes spoke of his studies of the larval stages of the Lepidoptera and requested specimens from the members.

C. A. Frost, *Secretary*.

The 292nd regular and the 33rd annual meeting since incorporation was held at the rooms of the Appalachian Mountain Club on Tuesday evening, January 18, 1910. There were ten members present: President Bolster and Messrs. Blackburn, Brues, Emerton, Frost, Newcomb, Reiff, Sheriff, Swett, and Timberlake.

After the reports of the Secretary and Treasurer had been read the following officers were elected for the ensuing year:

President—Prof. W. M. Wheeler.

Vice President—W. F. Fiske.

Secretary—C. A. Frost.

Treasurer—F. A. Sheriff.

Executive Committee—J. H. Emerton, C. W. Johnson, P. G. Bolster.

Editor-in-Chief of *PSYCHE*—C. T. Brues.

The retiring President, Mr. P. G. Bolster, then gave the address: "Remarks on the History of the Cambridge Entomological club."

Materials for this paper were gathered from the records of the club and proved to be of great interest. Mr. J. H. Emerton, who attended many of the earlier meetings and who was one of the original organizers of the club added some recollections to Mr. Bolster's remarks. The progress of the club was reviewed from the first meeting at the home of Dr. Hagen at Cambridge down to the present date in so far as the records were available. Lists of the officers of the club, addresses of the retiring presidents, and much other data of historical interest were given. Mention was also made of the number of prominent entomologists throughout the country who have, at one time or another, been members of the club. Mr. Bolster closed his remarks by recommending that an index of the records be made for the valuable and interesting data that appear in them.

C. A. FROST, *Secretary*.

Meeting called to order by President W. M. Wheeler at 8 o'clock. Twenty members and two visitors present.

The Secretary being absent, Mr. H. S. Smith was appointed to act as Secretary *pro tem*.

Mr. Fiske gave a talk on "Hypermetamorphosis among Insects." The various types of hypermetamorphosis as defined and designated by Packard and as encountered in the work at the Gipsy Moth Parasite Laboratory were not at all analogous to each other Mr. Fiske stated. These phenomena fall distinctly into two groups, the one typified by that type of hypermetamorphosis occurring in certain beetles (*Rhipiphoridae*, *Meloëidæ*) and the Hymenopterous genera *Perilampus* and *Orasema*, the other typified by that form of development occurring in certain Proctotrypids (*Inostemma*, *Platygaster*) and most of the Ichneumonids (*Ophion*, *Theronia*, *Limneria*, *Ichneumon*). The former he designated as Incomplete Hypermetamorphosis and the latter type as Complete Hypermetamorphosis.

The president asked Mr. Fiske to take the chair while he read a review of "A Monographic Revision of the Twisted-Winged Insects of the Order Strepsiptera Kirby" by W. Dwight Pierce. This paper was discussed by Messrs. Brues, Johnson, Fiske and others.

Mr. Newcomb exhibited some interesting photographs of hybrids and variations in the butterfly genus *Basilarchia*. He also showed an interesting melanistic specimen of *Argynnis cybele* from northern Wisconsin. Mr.

Reiff remarked on the work of certain European investigators upon the phenomenon of melanism in the genus *Argynnis* as occurring in Europe.

Mr. Emerton gave his report of the committee on the smoker given at the time of the meeting of the American Association for the Advancement of Science.

Mr. Brues made some remarks on the new form given to *PSYCHE* and stated that the forthcoming number would be in the regular octavo size instead of the royal octavo as heretofore. He asked especially for short notes and papers for publication.

The following persons were proposed for membership in the club:

Mrs. R. L. Draper, Canton, Mass.

Dr. J. S. Kingsley, professor of zoölogy in Tufts College.

Dr. Wheeler stated that certain rooms at the Bussey Institution were being remodeled and repaired and it was hoped that future meetings of the club might be there. It was moved and seconded that the next meeting of the club be held in these rooms. Carried.

HARRY S. SMITH,

*Secretary pro tem.*

The 294th regular meeting of the club was held at the Bussey Institution, Forest Hills, Tuesday evening, March 15, with 17 members and three visitors president, and President Wheeler in the chair. The minutes of the January and also the February meetings were read and accepted.

It was voted that extracts from the minutes of the meetings be published regularly in *PSYCHE*.

Mrs. R. L. Draper of Canton, Mass., and Dr. J. S. Kingsley, professor of zoölogy in Tufts College, were elected to membership. Mr. C. E. Montgomery, 338 Boylston Street, Boston, was proposed for membership by C. W. Johnson and W. L. W. Field. The resignation of R. W. Harris of Melrose was accepted. Mr. J. H. Emerton's paper on "Some Cases of Dimorphism in Spiders" was then presented with blackboard sketches; drawings, made with his usual care and accuracy, and alcoholic specimens of the species under discussion were also handed around. The following cases were described: 1. The females of *Misumena vatia* and *Misumena aleataria* may be either white or yellow. 2. Males of *Maria vittata* have one form with spotted legs and colors like the female and another with white legs and the rest of the body black. 3. *Agræca pratensis* and *Agræca repens* are probably one species with one kind of male and females with two different forms of the epigynum. Females found at the same time and place have both forms. 4. *Ceratinella latibilis* has two forms of male palpus, one with a short tibia with a wide tooth and a smooth edge to the tarsus. The other with a narrower tibia and tooth half as wide and the edge of the tarsus with two ridges.

Mr. C. W. Johnson spoke on the so-called "Ground Pearls," *Margarodes formicarium* of the West Indies. The specimens shown are formed by

the female nymphs in which they are encysted and often remain a long period. They are very common on newly cleared land. Heavy rains carry immense numbers to the shore, where they are frequently gathered with sea-shells and often strung as beads for necklaces, etc. This species was described by Guiling (Trans. Linn. Soc., London, 1833, p. 115, pl. 1) as a parasite of ants, but it is probable that their relation to the ants is similar to that of other Coccidæ. A species *M. vitum*, is described by Mayet (Ann. Soc. Ent. France, 1896, p. 419) as infesting the roots of the vines in Chili. Prof. Wheeler called attention to a new species of *Margarodes* recently described from southern Europe.

Mr. Johnson referred to a recent paper by Prof. Stein (Wiener Ent. Zeitschr., XXIX p. 11, 1910) on the genus *Fucellia*. A study of all the material at hand from Labrador to Florida, shows only one species, referable to *F. marina* Macq. and not to *F. fucorum* Fallén.

Prof. A. P. Morse gave a paper on "A Hopperdozer for Rough Ground." This was illustrated by drawings of the apparatus which is designed to catch young grasshoppers when they are destructively prevalent as they are at times in New England and where the ground is so rough that any other device of this kind is useless. His suggestion that the plates be covered with "tanglefoot" used for banding trees was discussed by the members.

Mr. Newcomb reported the occurrence of a noctuid moth flying on March 3rd. Dr. Reagh said that he had seen three moths flying on Feb. 22, and on the eighth of March took a specimen of *Phygalia titea*. Mr. Swett remarked on the records of the captures of *Phygalia olivacearia* and said that its occurrence seems to be limited to a few days about March 31st. Mr. Emerton showed two early spring insects, *Chionea valga*, a Tipulid fly with vestigial wings, found on snow at Three Mile Island, Lake Winnepesaukee, N. H., Feb. 21, 1910, and *Capnia pygmaea*, a Neuropteroid insect on snow at Jackson, N. H., Feb. 21.

The meeting then adjourned to the laboratory, where refreshments were enjoyed by all, through the kindness of Prof. Wheeler.

C. A. Frost, *Secretary*.